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Exhibit P-40, Budget Line Item Justification: PB 2019 Navy								Date: February 2018				
Appropriation / Budget Activity / Budget Sub Activity: 1810N: Other Procurement, Navy / BA 02: Communications & Electronics Equip / BSA 7: Other Ship Electronic Equipment							P-1 Line Item Number / Title: 2606 / Cooperative Engagement Capability					
ID Code (A=Service Ready, B=Not Service Ready): A			Program Elements for Code B Items: 0607658N, 0603658N				Other Related Program Elements: N/A					
Line Item MDAP/MAIS Code: N/A												
Resource Summary	Prior Years	FY 2017	FY 2018	FY 2019 Base	FY 2019 OCO	FY 2019 Total	FY 2020	FY 2021	FY 2022	FY 2023	To Complete	Total
Procurement Quantity (Units in Each)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost (\$ in Millions)	815.776	17.965	23.892	44.173	0.000	44.173	32.132	31.827	32.419	33.127	31.641	1,062.952
Less PY Advance Procurement (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) (\$ in Millions)	815.776	17.965	23.892	44.173	0.000	44.173	32.132	31.827	32.419	33.127	31.641	1,062.952
Plus CY Advance Procurement (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority (\$ in Millions)	815.776	17.965	23.892	44.173	0.000	44.173	32.132	31.827	32.419	33.127	31.641	1,062.952
(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)												
Initial Spares (\$ in Millions)	-	1.078	1.492	0.831	-	0.831	2.153	0.920	0.789	0.576	Continuing	Continuing
Flyaway Unit Cost (\$ in Dollars)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost (\$ in Dollars)	-	-	-	-	-	-	-	-	-	-	-	-
Description:												
The FY 2019 funding request was reduced by \$.193 million to reflect the Department of Navy's effort to support the Office of Management and Budget directed reforms for Efficiency and Effectiveness that include a lean, accountable, more efficient government.												
Cooperative Engagement Capability (CEC) significantly improves Battle Force Anti-Air Warfare (AAW) capability by coordinating all Battle Force AAW sensors into a single, real-time, composite track picture capable of fire control quality. CEC distributes sensor data from each ship and aircraft, or cooperating unit (CU), to all other CUs in the battle force through a real-time, line of sight, high data rate sensor and engagement data distribution network. CEC is highly resistant to jamming and provides accurate gridlocking between CUs. Each CU independently employs high capacity, parallel processing and advanced algorithms to combine all distributed sensor data into a fire control quality track picture which is the same for all CUs. CEC data is presented as a superset of the best AAW sensor capabilities from each CU, all of which are integrated into a single input to each CU's combat weapons system. CEC significantly improves our Battle Force defense in depth, including both local area and ship defense capabilities against current and future AAW threats. Moreover, CEC provides critical connectivity and integration of over-land air defense systems capable of countering emerging air threats, including land attack cruise missiles, in a complex littoral environment.												
CEC consists of the Data Distribution System (DDS), the Cooperative Engagement Processor (CEP), and Combat System modifications. The DDS encodes and distributes ownship sensor and engagement data and is a high capacity, jam resistant, directive system providing a precision gridlocking and high throughput of data. The CEP is a high capacity distributed processor that is able to process force levels of data in near real-time. This data is passed to the ship's combat system as high quality data for which the ship can cue its onboard sensors or use the data to engage targets without actually tracking them. The Navy has begun implementation of a Pre-Planned Product Improvement (P3I) approach to modify the current equipment to meet reduced size, weight, cost, power and cooling objectives. This P3I approach also supports continuity for interoperability improvements and program protection, as well as supporting open architecture initiatives and comms independence. P3I will provide hardware which complies with Category 3 Open Architecture Core Environment (OACE) standards with rehosted existing software, which will be fielded fleet-wide to allow affordable replacement of obsolete computing system components and eliminate dependencies on "closed" equipment, operating systems, and middleware.												
A family of antennas approach will be used to satisfy CEC requirements with lower life cycle costs (procurement, installation, and maintenance) and reduced weight (on mast and below deck). These antennas enable future capability as well as providing a solution extensible to additional platforms. A competitive contract for Common Array Block (CAB) antenna development and production was awarded late FY13. CEC is planned for shipboard installations at various Naval and commercial shipyards aboard CG/CG Mod, DDG/DDG Mod, CV/CVN, LPD, LHD, DDG 1000, and LHA ship classes during scheduled ship availability periods and at land based test sites (LBTS).												

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ID Code (A=Service Ready, B=Not Service Ready): A	Program Elements for Code B Items: 0607658N, 0603658N	Other Related Program Elements: N/A
Line Item MDAP/MAIS Code: N/A		
[P40A / UC002 - AN/UYQ-70 DISPLAY]: This is a sunk cost to fund the procurement of the AN/UYQ-70 display system for use and integration with the CEC system.		
[P40A / UC004 - ECP/KIT PROCUREMENT]: These funds are for the procurement and installation of Engineering Change Proposals (ECPs)(AN/USG-2 to AN/USG-2B upgrades/AN/USG-2A to AN/USG-2B upgrades) Field Change Kits to address CEC parts obsolescence associated with interfacing systems on multiple platforms.		
[P40A / UC005 - NON-RECURRING DEPOT COST]: This is a sunk cost to establish a depot for the CEC system.		
[P40A / UC006 - VISUAL INTERACTIVE SIMULATED TRAINING APPLICATION (VISTA) TRAINING]: This is a sunk cost to fund VISTA training related to the CEC system.		
[P40A / UC008 - SUPPLY SUPPORT]: This is a sunk cost for Supply Support for the CEC system.		
[P40A / UC011 - SIGNAL DATA PROCESSORS (SDP) BACKFITS (LBTS)]: Funds are for the procurement of Signal Data Processors (SDP) backfits at Land Based Test Sites (LBTSS). There are no installation costs associated with these procurements because the installations will be performed by employees at the LBTSS.		
[P40A / UC013 - AN/USG-2B HARDWARE CONVERSION KITS (AN/USG-2)]: Funds are for the procurement of AN/USG-2B hardware conversion kits for the CEC AN/USG-2 system configuration.		
[P40A / AN/USG-2B HARDWARE CONVERSION KITS (AN/USG-2)]: FY 19 - Added procurement quantity of 5 units for Mode 5 IFF Acceleration		
[P40A / UC014 - AN/USG-2B HARDWARE CONVERSION KITS (AN/USG-2A)]: Funds are for the procurement of AN/USG-2B hardware conversion kits for the AN/USG-2A CEC system configuration.		
[P40A / UC015 - AN/USG-2B HARDWARE CONVERSION KITS (LBTS)]: Funds are for the procurement of AN/USG-2B hardware conversion kits for CEC Land Based Test Sites.		
[P40A / UC830 - PRODUCTION ENGR. SUPPORT]: These funds are for production engineering support for CEC systems.		
[P40A / UCCA1 - CONGRESSIONAL ADD]: These are Congressional add funds.		
[P3A / UC001 - COOPERATIVE ENGAGEMENT TRANSMISSION PROCESSING SET (USG-2/2A/2B)]: These funds are for the procurement of CEC to backfit CG, DDG, CV/CVN, and LHD ship classes, as well as Land Based Test Sites (LBTSS).		
[P3A - 2 / UC003 - PAAA BACKFIT KITS]: These funds are for the procurement of Planar Antenna Array Assembly (PAAA) backfit kits.		
[P3A - 3 / UC009 - SIGNAL DATA PROCESSOR (SDP) BACKFITS (AN/USG-2)]: Funds are for the procurement of Signal Data Processors (SDP) backfits.		
[P3A - 4 / UC010 - SIGNAL DATA PROCESSORS (SDP) BACKFITS (AN/USG-2A)]: Funds are for the procurement of Signal Data Processors (SDP) backfits for AN/USG-2A equipment.		
[P3A - 5 / UC012 - COMMON ARRAY BLOCK (CAB) ANTENNA - SHIPBOARD]: Funds are for the procurement of Common Array Block (CAB) antennas for shipboard AN/USG-2B systems.		

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ID Code (A=Service Ready, B=Not Service Ready): A		Program Elements for Code B Items: 0607658N, 0603658N		Other Related Program Elements: N/A	
Line Item MDAP/MAIS Code: N/A					

Exhibits Schedule					Prior Years	FY 2017	FY 2018	FY 2019 Base	FY 2019 OCO	FY 2019 Total
Exhibit Type	Title*	Subexhibits	ID CD	MDAP/MAIS Code	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)
P-40a	COOPERATIVE ENGAGEMENT CAPABILITY	P-5a			- / 274.421	- / 8.261	- / 11.235	- / 12.998	- / -	- / 12.998
P-3a	1 / UC001 - COOPERATIVE ENGAGEMENT TRANSMISSION PROCESSING SET (USG-2/2A/2B) (SGAAW)				- / 442.477	- / 0.182	- / 7.472	- / 10.966	- / 0.000	- / 10.966
P-3a	2 / UC003 - PAAA BACKFIT KITS (SGAAW)				- / 57.795	- / 2.644	- / 1.508	- / 2.355	- / 0.000	- / 2.355
P-3a	3 / UC009 - SIGNAL DATA PROCESSOR (SDP) BACKFITS (AN/USG-2) (SGAAW)				- / 24.183	- / 3.839	- / 3.285	- / 8.081	- / 0.000	- / 8.081
P-3a	4 / UC010 - SIGNAL DATA PROCESSORS (SDP) BACKFITS (AN/USG-2A) (SGAAW)				- / 13.500	- / 1.217	- / 0.392	- / 0.421	- / 0.000	- / 0.421
P-3a	5 / UC012 - COMMON ARRAY BLOCK (CAB) ANTENNA - SHIPBOARD (SGAAW)				- / 3.400	- / 1.822	- / 0.000	- / 9.352	- / 0.000	- / 9.352
P-40	Total Gross/Weapon System Cost				- / 815.776	- / 17.965	- / 23.892	- / 44.173	- / 0.000	- / 44.173

Exhibits Schedule					FY 2020	FY 2021	FY 2022	FY 2023	To Complete	Total
Exhibit Type	Title*	Subexhibits	ID CD	MDAP/MAIS Code	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)
P-40a	COOPERATIVE ENGAGEMENT CAPABILITY	P-5a			- / -	- / -	- / -	- / -	- / -	- / -
P-3a	1 / UC001 - COOPERATIVE ENGAGEMENT TRANSMISSION PROCESSING SET (USG-2/2A/2B) (SGAAW)				- / 2.047	- / 3.800	- / 0.000	- / 0.000	- / 0.000	- / 466.944
P-3a	2 / UC003 - PAAA BACKFIT KITS (SGAAW)				- / 1.211	- / 0.000	- / 0.000	- / 0.000	- / 0.000	- / 65.513
P-3a	3 / UC009 - SIGNAL DATA PROCESSOR (SDP) BACKFITS (AN/USG-2) (SGAAW)				- / 2.666	- / 2.317	- / 1.533	- / 0.000	- / 0.000	- / 45.904
P-3a	4 / UC010 - SIGNAL DATA PROCESSORS (SDP) BACKFITS (AN/USG-2A) (SGAAW)				- / 0.804	- / 0.384	- / 0.000	- / 0.000	- / 0.000	- / 16.718
P-3a	5 / UC012 - COMMON ARRAY BLOCK (CAB) ANTENNA - SHIPBOARD (SGAAW)				- / 13.226	- / 18.120	- / 21.656	- / 21.739	- / 58.359	- / 147.674
P-40	Total Gross/Weapon System Cost				- / 32.132	- / 31.827	- / 32.419	- / 33.127	- / 31.641	- / 1,062.952

*Title represents 1) the Number / Title for Items; 2) the Number / Title [DODIC] for Ammunition; and/or 3) the Number / Title (Modification Type) for Modifications. Title represents the P-40a Title when only the P-40a Summary/Total is shown.

Note: Totals in this Exhibit P-40 set may not be exact or sum exactly due to rounding.

Justification:
Funds are to procure hardware and provide associated support for the CEC system. Requirements are driven by planned procurements of CEC for LHD 2-6, Planar Antenna Array Assembly (PAAA) antennas, and Signal Data Processor (SDP) backfit kits. Increase to FY 18 requirements are to procure hardware in alignment with Fleet Modernization Procurement and Installation Plan for CEC Backfit to CG, DDG, CVN, and LHD ship classes as well as Land Based Test Sites (LBTS). Funding increase to support additional FY 19 requirements to accelerate procurement and installation of hardware required for Mode 5 Identification Friend/Foe (IFF) capability to the Fleet by 2020.

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Exhibit P-40a, Budget Item Justification For Aggregated Items: PB 2019 Navy																Date: February 2018				
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 7								P-1 Line Item Number / Title: 2606 / Cooperative Engagement Capability								Aggregated Items Title: COOPERATIVE ENGAGEMENT CAPABILITY				
Item Number / Title [DODIC]	ID CD	MDAP/ MAIS Code	Prior Years			FY 2017			FY 2018			FY 2019 Base			FY 2019 OCO			FY 2019 Total		
			Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)
1) UC002 - AN/UYQ-70 DISPLAY																				
1.1) AN/UYQ-70 DISPLAY	A		-	-	21.493	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Subtotal: 1) UC002 - AN/UYQ-70 DISPLAY			-	-	21.493	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2) UC004 - ECP/KIT PROCUREMENT ⁽¹⁾																				
2.1) ECP/KIT PROCUREMENT ⁽²⁾	A		-	-	100.542	-	-	2.993	-	-	3.279	-	-	3.503	-	-	-	-	-	3.503
Subtotal: 2) UC004 - ECP/KIT PROCUREMENT			-	-	100.542	-	-	2.993	-	-	3.279	-	-	3.503	-	-	-	-	-	3.503
3) UC005 - NON-RECURRING DEPOT COST																				
3.1) NON- RECURRING DEPOT SUPPORT	A		-	-	4.500	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Subtotal: 3) UC005 - NON- RECURRING DEPOT COST			-	-	4.500	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4) UC006 - VISUAL INTERACTIVE SIMULATED TRAINING APPLICATION (VISTA) TRAINING																				
4.1) VISUAL INTERACTIVE SIMULATED TRAINING APPLICATION (VISTA) TRAINING	A		-	-	0.700	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Subtotal: 4) UC006 - VISUAL INTERACTIVE SIMULATED TRAINING APPLICATION (VISTA) TRAINING			-	-	0.700	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
5) UC008 - SUPPLY SUPPORT																				
5.1) SUPPLY SUPPORT	A		-	-	6.094	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Subtotal: 5) UC008 - SUPPLY SUPPORT			-	-	6.094	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
6) UC011 - SIGNAL DATA PROCESSORS (SDP) BACKFITS (LBTS)																				
6.1) SIGNAL DATA PROCESSORS (SDP) BACKFITS (LBTS) ^(†)	A		405,846.15	13	5.276	227,154.00	2	0.454	231,697.00	5	1.158	236,331.00	1	0.236	-	-	-	236,331.00	1	0.236
Subtotal: 6) UC011 - SIGNAL DATA PROCESSORS (SDP) BACKFITS (LBTS)			-	-	5.276	-	-	0.454	-	-	1.158	-	-	0.236	-	-	-	-	-	0.236
7) UC013 - AN/USG-2B HARDWARE CONVERSION KITS (AN/USG-2)																				
7.1) AN/USG-2B HARDWARE	A		349,722.22	18	6.295	383,833.33	1	0.384	391,600.00	3	1.175	399,545.00	9	3.596	-	-	-	399,545.00	9	3.596

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Exhibit P-40a, Budget Item Justification For Aggregated Items: PB 2019 Navy																Date: February 2018				
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 7								P-1 Line Item Number / Title: 2606 / Cooperative Engagement Capability								Aggregated Items Title: COOPERATIVE ENGAGEMENT CAPABILITY				
Item Number / Title [DODIC]	ID CD	MDAP/MAIS Code	Prior Years			FY 2017			FY 2018			FY 2019 Base			FY 2019 OCO			FY 2019 Total		
			Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)
CONVERSION KITS (AN/USG-2) ^{(3)(†)}																				
Subtotal: 7) UC013 - AN/USG-2B HARDWARE CONVERSION KITS (AN/USG-2)			-	-	6.295	-	-	0.384	-	-	1.175	-	-	3.596	-	-	-	-	-	3.596
8) UC014 - AN/USG-2B HARDWARE CONVERSION KITS (AN/USG-2A)																				
8.1) AN/USG-2B HARDWARE CONVERSION KIT (AN/USG-2A) ^(†)	A		267,727.27	11	2.945	293,000.00	1	0.293	299,000.00	1	0.299	304,837.00	1	0.305	-	-	-	304,837.00	1	0.305
Subtotal: 8) UC014 - AN/USG-2B HARDWARE CONVERSION KITS (AN/USG-2A)			-	-	2.945	-	-	0.293	-	-	0.299	-	-	0.305	-	-	-	-	-	0.305
9) UC015 - AN/USG-2B HARDWARE CONVERSION KITS (LBTS) ⁽⁴⁾																				
9.1) AN/USG-2B HARDWARE CONVERSION KITS (LBTS) ^(†)	A		367,200.00	5	1.836	386,509.00	2	0.773	394,300.00	5	1.972	402,124.00	1	0.402	-	-	-	402,124.00	1	0.402
Subtotal: 9) UC015 - AN/USG-2B HARDWARE CONVERSION KITS (LBTS)			-	-	1.836	-	-	0.773	-	-	1.972	-	-	0.402	-	-	-	-	-	0.402
10) UC830 - PRODUCTION ENGR. SUPPORT ⁽⁵⁾																				
10.1) PRODUCTION ENGR. SUPPORT ⁽⁶⁾	A		-	-	87.201	-	-	3.364	-	-	3.352	-	-	4.956	-	-	-	-	-	4.956
Subtotal: 10) UC830 - PRODUCTION ENGR. SUPPORT			-	-	87.201	-	-	3.364	-	-	3.352	-	-	4.956	-	-	-	-	-	4.956
11) UCCA1 - CONGRESSIONAL ADD																				
11.1) CONGRESSIONAL ADD	A		-	-	23.249	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Subtotal: 11) UCCA1 - CONGRESSIONAL ADD			-	-	23.249	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
12) UC6IN - NON-FMP INSTALLATION																				
12.1) NON-FMP INSTALLATION	A		-	-	14.290	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Subtotal: 12) UC6IN - NON-FMP INSTALLATION			-	-	14.290	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total			-	-	274.421	-	-	8.261	-	-	11.235	-	-	12.998	-	-	-	-	-	12.998
Note: Subtotals or Totals in this Exhibit P-40a may not be exact or sum exactly, due to rounding.																				
^(†) indicates the presence of a P-5a																				

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Exhibit P-40a, Budget Item Justification For Aggregated Items: PB 2019 Navy		Date: February 2018
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 7	P-1 Line Item Number / Title: 2606 / Cooperative Engagement Capability	Aggregated Items Title: COOPERATIVE ENGAGEMENT CAPABILITY
Footnotes: (1) These funds are for the procurement and installation of Engineering Change Proposals (ECPs)(AN/USG-2 to AN/USG-2B upgrades/AN/USG-2A to AN/USG-2B upgrades) Field Change Kits to address CEC parts obsolescence associated with interfacing systems on multiple platforms. (2) Increased funding in FY 19 to account for CAB ECP planning costs. Increased funding in FY 23 to address CAB and SDP-S obsolescence. (3) FY 19 - Added procurement quantity of 5 units for Mode 5 IFF Acceleration (4) FY 18 requirements are for the procurement of additional AN/USG-2B hardware conversion kits for CEC Land Based Test Sites in order for hardware to current reflect Fleet configurations. (5) These funds are for production engineering support for CEC systems. (6) Increased funding in FY 19 to account for additional CAB production engineering planning costs. Increased funding in FY 22-23 to account for CAB and SDP-S hardware improvement initiatives.		

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Exhibit P-5a, Procurement History and Planning: PB 2019 Navy								Date: February 2018				
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 7				P-1 Line Item Number / Title: 2606 / Cooperative Engagement Capability				Aggregated Items: COOPERATIVE ENGAGEMENT CAPABILITY				
Item Number / Title [DODIC]	O C O	FY	Contractor and Location	Method/Type or Funding Vehicle	Location of PCO	Award Date	Date of First Delivery	Qty (Each)	Unit Cost (\$)	Specs Avail Now?	Date Revision Available	RFP Issue Date
6) UC011 - SIGNAL DATA PROCESSORS (SDP) BACKFITS (LBTS)												
6.1) SIGNAL DATA PROCESSORS (SDP) BACKFITS (LBTS)		2011	Sechan Electronics, Inc. / Lititz, PA	C / IDIQ	Washington, DC	Dec 2011	Jun 2013	5	450,000.00	Y		Dec 2010
6.1) SIGNAL DATA PROCESSORS (SDP) BACKFITS (LBTS)		2012	Sechan Electronics, Inc. / Lititz, PA	SS / IDIQ	Washington, DC	Dec 2012	Jun 2014	3	669,000.00	Y		
6.1) SIGNAL DATA PROCESSORS (SDP) BACKFITS (LBTS)		2014	Sechan Electronics, Inc. / Lititz, PA	SS / IDIQ	Washington, DC	May 2014	Nov 2015	3	194,094.00	Y		
6.1) SIGNAL DATA PROCESSORS (SDP) BACKFITS (LBTS)		2015	Sechan Electronics, Inc. / Lititz, PA	SS / IDIQ	Washington, DC	May 2015	Nov 2016	2	218,500.00	Y		
6.1) SIGNAL DATA PROCESSORS (SDP) BACKFITS (LBTS)		2017 ⁽⁷⁾	TBD / TBD	C / IDIQ	Washington, DC Washington, DC	May 2017	Nov 2018	2	227,154.00	Y		Aug 2016
6.1) SIGNAL DATA PROCESSORS (SDP) BACKFITS (LBTS)		2018	TBD / TBD	SS / IDIQ	Washington, DC	May 2018	Nov 2019	5	231,697.00	Y		
6.1) SIGNAL DATA PROCESSORS (SDP) BACKFITS (LBTS)		2019	TBD / TBD	C / TBD	** NO PCO **	Oct 2018	Oct 2019	1	236,331.00	N		
7) UC013 - AN/USG-2B HARDWARE CONVERSION KITS (AN/USG-2)												
7.1) AN/USG-2B HARDWARE CONVERSION KITS (AN/USG-2) (3)		2014 ⁽⁸⁾	Raytheon / St. Petersburg, FL	SS / FFP	Washington, DC	Apr 2014	Jun 2015	8	361,750.00	Y		
7.1) AN/USG-2B HARDWARE CONVERSION KITS (AN/USG-2) (3)		2015 ⁽⁹⁾	DRS Technologies / Johnstown, PA	C / FFP	Washington, DC	Aug 2015	Oct 2016	8	369,000.00	Y		
7.1) AN/USG-2B HARDWARE CONVERSION KITS (AN/USG-2) (3)		2016 ⁽¹⁰⁾	DRS Technologies / Johnstown, PA	SS / FFP	Washington, DC	Jul 2016	Sep 2017	2	224,500.00	Y		
7.1) AN/USG-2B HARDWARE CONVERSION KITS (AN/USG-2) (3)		2017 ⁽¹¹⁾	DRS Technologies / Johnstown, PA	SS / FFP	Washington, DC	Mar 2017	May 2018	1	383,833.33	Y		
7.1) AN/USG-2B HARDWARE CONVERSION KITS (AN/USG-2) (3)		2018 ⁽¹²⁾	DRS Technologies / Johnstown, PA	SS / FFP	Washington, DC	Mar 2018	May 2019	3	391,600.00	Y		
8) UC014 - AN/USG-2B HARDWARE CONVERSION KITS (AN/USG-2A)												

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Exhibit P-5a, Procurement History and Planning: PB 2019 Navy		Date: February 2018
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 7	P-1 Line Item Number / Title: 2606 / Cooperative Engagement Capability	Aggregated Items: COOPERATIVE ENGAGEMENT CAPABILITY

Item Number / Title [DODIC]	O C O	FY	Contractor and Location	Method/Type or Funding Vehicle	Location of PCO	Award Date	Date of First Delivery	Qty (Each)	Unit Cost (\$)	Specs Avail Now?	Date Revision Available	RFP Issue Date
8.1) AN/USG-2B HARDWARE CONVERSION KIT (AN/USG-2A)		2014 ⁽¹³⁾	Raytheon / St. Petersburg, FL	SS / FFP	Washington, DC	Apr 2014	Jun 2015	7	276,060.00	Y		
8.1) AN/USG-2B HARDWARE CONVERSION KIT (AN/USG-2A)		2015 ⁽¹⁴⁾	DRS Technologies / Johnstown, PA	C / FFP	Washington, DC	Aug 2015	Oct 2016	3	281,666.67	Y		
8.1) AN/USG-2B HARDWARE CONVERSION KIT (AN/USG-2A)		2016 ⁽¹⁵⁾	DRS Technologies / Johnstown, PA	SS / FFP	Washington, DC	Jul 2016	Sep 2017	1	168,000.00	Y		
8.1) AN/USG-2B HARDWARE CONVERSION KIT (AN/USG-2A)		2017 ⁽¹⁶⁾	DRS Technologies / Johnstown, PA	SS / FFP	Washington, DC	Mar 2017	May 2018	1	293,000.00	Y		
8.1) AN/USG-2B HARDWARE CONVERSION KIT (AN/USG-2A)		2018 ⁽¹⁷⁾	DRS Technologies / Johnstown, PA	SS / FFP	Washington, DC	Mar 2018	May 2019	1	299,000.00	Y		
9) UC015 - AN/USG-2B HARDWARE CONVERSION KITS (LBTS)												
9.1) AN/USG-2B HARDWARE CONVERSION KITS (LBTS)		2014 ⁽¹⁸⁾	Raytheon / St. Petersburg, FL	SS / FFP	Washington, DC	Apr 2014	Jun 2015	3	364,410.00	Y		
9.1) AN/USG-2B HARDWARE CONVERSION KITS (LBTS)		2015 ⁽¹⁹⁾	DRS Technologies / Johnstown, PA	C / FFP	Washington, DCWashington, DC	Aug 2015	Oct 2016	2	371,500.00	Y		
9.1) AN/USG-2B HARDWARE CONVERSION KITS (LBTS)		2017	DRS Technologies / Johnstown, PA	SS / FFP	Washington, DC	Mar 2017	May 2018	2	386,509.00	Y		
9.1) AN/USG-2B HARDWARE CONVERSION KITS (LBTS)		2018	DRS Technologies / Johnstown, PA	SS / FFP	Washington, DC	Mar 2018	May 2019	5	394,300.00	Y		

Footnotes:

⁽⁷⁾ This will be a competitively awarded contract 3Q FY17 with options in FY18.

⁽⁸⁾ The last option year under the current CEC Production contract was FY14. Two additional option years have been added to the contract for FY15 and FY16.

⁽⁹⁾ Procurement of this equipment transitioned to a new Production contract starting in FY15.

⁽¹⁰⁾ 2016 - Option Year 1 of DRS Production Contract

⁽¹¹⁾ 2017- Option Year 2 of DRS Production Contract

⁽¹²⁾ 2018- Option Year 3 of DRS Production Contract

⁽¹³⁾ The last option year under the current CEC Production contract was FY14. Two additional option years have been added to the contract for FY15 and FY16.

⁽¹⁴⁾ Procurement of this equipment transitioned to a new Production contract starting in FY15.

⁽¹⁵⁾ 2016 - Option Year 1 of DRS Production Contract

⁽¹⁶⁾ 2017 - Option Year 2 of DRS Production Contract

⁽¹⁷⁾ 2018 - Option Year 3 of DRS Production Contract

⁽¹⁸⁾ The last option year under the current CEC Production contract was FY14. Two additional option years have been added to the contract for FY15 and FY16.

⁽¹⁹⁾ Procurement of this equipment transitioned to a new Production contract starting in FY15.

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Exhibit P-3a, Individual Modification: PB 2019 Navy						Date: February 2018					
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 7				P-1 Line Item Number / Title: 2606 / Cooperative Engagement Capability				Modification Number / Title: 1 / UC001 - COOPERATIVE ENGAGEMENT TRANSMISSION PROCESSING SET (USG-2/2A/2B)			

ID Code (A=Service Ready, B=Not Service Ready) :						MDAP/MAIS Code:						
Resource Summary	Prior Years	FY 2017	FY 2018	FY 2019 Base	FY 2019 OCO	FY 2019 Total	FY 2020	FY 2021	FY 2022	FY 2023	To Complete	Total
Procurement Quantity <i>(Units in Each)</i>	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost <i>(\$ in Millions)</i>	442.477	0.182	7.472	10.966	0.000	10.966	2.047	3.800	0.000	0.000	0.000	466.944
Less PY Advance Procurement <i>(\$ in Millions)</i>	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) <i>(\$ in Millions)</i>	442.477	0.182	7.472	10.966	0.000	10.966	2.047	3.800	0.000	0.000	0.000	466.944
Plus CY Advance Procurement <i>(\$ in Millions)</i>	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority <i>(\$ in Millions)</i>	442.477	0.182	7.472	10.966	0.000	10.966	2.047	3.800	0.000	0.000	0.000	466.944
<i>(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)</i>												
Initial Spares <i>(\$ in Millions)</i>	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost <i>(\$ in Dollars)</i>	-	-	-	-	-	-	-	-	-	-	-	-

Description:

Strike Group Anti-Air Warfare (AAW) Improvement. These funds are for the procurement of CEC to backfit CG, DDG, CV/CVN, and LHD ship classes, as well as various Land Based Test Sites (LBTs).

[COOPERATIVE ENGAGEMENT TRANSMISSION PROCESSING SET (USG-2/2A/2B)] Increases in cost to the USG-2B system from FY 16 to FY 18 is attributed to procuring a new type of hardware - a Common Block Array (CAB) Antenna vice PAAA antenna for LHD class ships in FY 18.

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Exhibit P-3a, Individual Modification: PB 2019 Navy								Date: February 2018					
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 7				P-1 Line Item Number / Title: 2606 / Cooperative Engagement Capability				Modification Number / Title: 1 / UC001 - COOPERATIVE ENGAGEMENT TRANSMISSION PROCESSING SET (USG-2/2A/2B)					
ID Code (A=Service Ready, B=Not Service Ready) :								MDAP/MAIS Code:					
Models of Systems Affected: UC001 COOPERATIVE ENGAGEMENT TRANSMISSION PROCESSING SET (CETPS) (AN/USG-2/2A/2B)				Modification Type: SGAAW				Related RDT&E PEs: 0603755N, 0603658N					
Financial Plan	Prior Years	FY 2017	FY 2018	FY 2019 Base	FY 2019 OCO	FY 2019 Total	FY 2020	FY 2021	FY 2022	FY 2023	To Complete	Total	
	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	
Procurement													
Modification Item 1 of 1: UC001 - COOPERATIVE ENGAGEMENT TRANSMISSION PROCESSING SET (USG-2/2A/2B)													
B Kits													
Recurring													
1.1.1) COOPERATIVE ENGAGEMENT TRANSMISSION PROCESSING SET (USG-2/2A/2B) - NonOrganic ⁽²⁰⁾	49 / 367.975	- / -	1 / 5.276	2 / 10.784	- / -	2 / 10.784	- / -	- / -	- / -	- / -	- / -	52 / 384.035	
Subtotal: Recurring	- / 367.975	- / -	- / 5.276	- / 10.784	- / -	- / 10.784	- / -	- / -	- / -	- / -	- / 0.000	- / 384.035	
Subtotal: UC001 - COOPERATIVE ENGAGEMENT TRANSMISSION PROCESSING SET (USG-2/2A/2B)	49 / 367.975	- / -	1 / 5.276	2 / 10.784	- / -	2 / 10.784	- / -	- / -	- / -	- / -	- / -	52 / 384.035	
Subtotal: Procurement, All Modification Items	- / 367.975	- / -	- / 5.276	- / 10.784	- / -	- / 10.784	- / -	- / -	- / -	- / -	- / 0.000	- / 384.035	
Installation													
Modification Item 1 of 1: UC001 - COOPERATIVE ENGAGEMENT TRANSMISSION PROCESSING SET (USG-2/2A/2B)	- / 74.502	- / 0.182	- / 2.196	- / 0.182	- / 0.000	- / 0.182	- / 2.047	- / 3.800	- / 0.000	- / 0.000	- / 0.000	- / 82.909	
Subtotal: Installation	- / 74.502	- / 0.182	- / 2.196	- / 0.182	- / -	- / 0.182	- / 2.047	- / 3.800	- / -	- / -	- / 0.000	- / 82.909	
Total													
Total Cost (Procurement + Support + Installation)	442.477	0.182	7.472	10.966	0.000	10.966	2.047	3.800	0.000	0.000	0.000	466.944	

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Exhibit P-3a, Individual Modification: PB 2019 Navy		Date: February 2018
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 7	P-1 Line Item Number / Title: 2606 / Cooperative Engagement Capability	Modification Number / Title: 1 / UC001 - COOPERATIVE ENGAGEMENT TRANSMISSION PROCESSING SET (USG-2/2A/2B)

ID Code (A=Service Ready, B=Not Service Ready) :	MDAP/MAIS Code:
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Modification Item 1 of 1: UC001 - COOPERATIVE ENGAGEMENT TRANSMISSION PROCESSING SET (USG-2/2A/2B)

Manufacturer Information

Manufacturer Name: DRS Technologies	Manufacturer Location: Johnstown, PA
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Administrative Leadtime (in Months): 1	Production Leadtime (in Months): 18
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Dates	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023
Contract Dates		Mar 2018	Mar 2019				
Delivery Dates		Sep 2019	Sep 2020				

Installation Information

Method of Implementation: ALTERATION INSTALLATION TEAM (AIT):: Installation Name: COOPERATIVE ENGAGEMENT TRANSMISSION PROCESSI

Installation Cost	Prior Years	FY 2017	FY 2018	FY 2019 Base	FY 2019 OCO	FY 2019 Total	FY 2020	FY 2021	FY 2022	FY 2023	To Complete	Total
	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)
Prior Years	48 / 74.502	0 / 0.182	1 / 2.196	- / -	- / -	- / -	- / -	- / -	- / -	- / -	0 / 0.000	49 / 76.880
FY 2017	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2018	- / -	- / -	- / -	0 / 0.182	0 / 0.000	0 / 0.182	1 / 2.047	- / -	- / -	- / -	0 / 0.000	1 / 2.229
FY 2019	- / -	- / -	- / -	- / -	- / -	- / -	- / -	2 / 3.800	- / -	- / -	0 / 0.000	2 / 3.800
FY 2020	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2021	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2022	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2023	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
To Complete	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
Total	48 / 74.502	0 / 0.182	1 / 2.196	0 / 0.182	0 / 0.000	0 / 0.182	1 / 2.047	2 / 3.800	- / -	- / -	0 / 0.000	52 / 82.909

Installation Schedule

	PYS	FY 2017				FY 2018				FY 2019				FY 2020				FY 2021				FY 2022				FY 2023				TC	Tot
		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4		
In	48	-	-	-	-	-	1	-	-	-	-	-	-	-	1	-	-	-	2	-	-	-	-	-	-	-	-	-	-	-	52
Out	48	-	-	-	-	-	1	-	-	-	-	-	-	-	1	-	-	-	2	-	-	-	-	-	-	-	-	-	-	-	52

Footnotes:
 (20) Funds in FY 17 are required for installation planning activities in preparation for installation in FY 18. Funds in FY 19 are required for installation planning activities in preparation for installation in FY 20. Increased installation funding in FY 18 to account for increases in installation costs due to new contract firm fixed price cost structure.

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Exhibit P-3a, Individual Modification: PB 2019 Navy										Date: February 2018		
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 7					P-1 Line Item Number / Title: 2606 / Cooperative Engagement Capability					Modification Number / Title: 2 / UC003 - PAAA BACKFIT KITS		
ID Code (A=Service Ready, B=Not Service Ready) :							MDAP/MAIS Code:					
Resource Summary	Prior Years	FY 2017	FY 2018	FY 2019 Base	FY 2019 OCO	FY 2019 Total	FY 2020	FY 2021	FY 2022	FY 2023	To Complete	Total
Procurement Quantity (<i>Units in Each</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost (<i>\$ in Millions</i>)	57.795	2.644	1.508	2.355	0.000	2.355	1.211	0.000	0.000	0.000	0.000	65.513
Less PY Advance Procurement (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) (<i>\$ in Millions</i>)	57.795	2.644	1.508	2.355	0.000	2.355	1.211	0.000	0.000	0.000	0.000	65.513
Plus CY Advance Procurement (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority (<i>\$ in Millions</i>)	57.795	2.644	1.508	2.355	0.000	2.355	1.211	0.000	0.000	0.000	0.000	65.513
<i>(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)</i>												
Initial Spares (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost (<i>\$ in Dollars</i>)	-	-	-	-	-	-	-	-	-	-	-	-
<p>Description:</p> <p>Strike Group Anti-Air Warfare (AAW) Improvement. The PAAA Backfit Kit procurements will be replaced with Common Array Block (CAB) - Shipboard Antenna procurements commencing in FY16. PAAA Backfit Kits are installed on CG, DDG, CVN, LPD, and LHD ship classes</p> <p>[PAAA BACKFIT KITS] The 2 PAAA antennas being procured in FY15 and 1 PAAA being procured in FY16 will replace 3 older SBAA antennas currently in the Fleet. These SBAA's are very expensive to maintain and some of the parts are becoming obsolete. PAAA Backfit Kits are installed on CG, DDG, CVN, LPD, and LHD ship classes</p>												

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Exhibit P-3a, Individual Modification: PB 2019 Navy										Date: February 2018			
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 7				P-1 Line Item Number / Title: 2606 / Cooperative Engagement Capability						Modification Number / Title: 2 / UC003 - PAAA BACKFIT KITS			
ID Code (A=Service Ready, B=Not Service Ready) :								MDAP/MAIS Code:					
Models of Systems Affected: UC003 PAAA BACKFIT KITS				Modification Type: SGAAW				Related RDT&E PEs: 0603755N, 0603658N					
Financial Plan	Prior Years	FY 2017	FY 2018	FY 2019 Base	FY 2019 OCO	FY 2019 Total	FY 2020	FY 2021	FY 2022	FY 2023	To Complete	Total	
	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	
Procurement													
Modification Item 1 of 1: UC003 - PAAA BACKFIT KITS													
B Kits													
Non-Recurring													
1.1.1) PAAA BACKFIT KITS - NonOrganic ⁽²¹⁾	13 / 43.312	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	13 / 43.312	
<i>Subtotal: Non-Recurring</i>	- / 43.312	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / 0.000	- / 43.312	
<i>Subtotal: UC003 - PAAA BACKFIT KITS</i>	13 / 43.312	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	13 / 43.312	
<i>Subtotal: Procurement, All Modification Items</i>	- / 43.312	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / 0.000	- / 43.312	
Installation													
Modification Item 1 of 1: UC003 - PAAA BACKFIT KITS	- / 14.483	- / 2.644	- / 1.508	- / 2.355	- / 0.000	- / 2.355	- / 1.211	- / 0.000	- / 0.000	- / 0.000	- / 0.000	- / 22.201	
<i>Subtotal: Installation</i>	- / 14.483	- / 2.644	- / 1.508	- / 2.355	- / -	- / 2.355	- / 1.211	- / -	- / -	- / -	- / 0.000	- / 22.201	
Total													
Total Cost (Procurement + Support + Installation)	57.795	2.644	1.508	2.355	0.000	2.355	1.211	0.000	0.000	0.000	0.000	65.513	

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Exhibit P-3a, Individual Modification: PB 2019 Navy											Date: February 2018																																		
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 7											P-1 Line Item Number / Title: 2606 / Cooperative Engagement Capability											Modification Number / Title: 2 / UC003 - PAAA BACKFIT KITS																							
ID Code (A=Service Ready, B=Not Service Ready) :											MDAP/MAIS Code:																																		
Modification Item 1 of 1: UC003 - PAAA BACKFIT KITS																																													
Manufacturer Information																																													
Manufacturer Name: RAYTHEON ⁽²²⁾													Manufacturer Location: ST. PETERSBURG, FL																																
Administrative Leadtime (in Months): 1													Production Leadtime (in Months): 18																																
Dates		FY 2017				FY 2018				FY 2019				FY 2020				FY 2021				FY 2022				FY 2023																			
Contract Dates																																													
Delivery Dates																																													
Installation Information																																													
Method of Implementation: ALTERATION INSTALLATION TEAM (AIT):: Installation Name: PAAA BACKFIT KITS																																													
Installation Cost		Prior Years	FY 2017				FY 2018				FY 2019 Base				FY 2019 OCO				FY 2019 Total				FY 2020				FY 2021				FY 2022				FY 2023				To Complete	Total					
		Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)				Qty (Each) / Total Cost (\$ M)				Qty (Each) / Total Cost (\$ M)				Qty (Each) / Total Cost (\$ M)				Qty (Each) / Total Cost (\$ M)				Qty (Each) / Total Cost (\$ M)				Qty (Each) / Total Cost (\$ M)				Qty (Each) / Total Cost (\$ M)				Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)									
Prior Years		9 / 14.483		1 / 2.644				1 / 1.508				1 / 2.355				0 / 0.000				1 / 2.355				1 / 1.211				- / -				- / -				- / -				0 / 0.000				13 / 22.201	
FY 2017		- / -		- / -				- / -				- / -				- / -				- / -				- / -				- / -				- / -				- / -				- / -				- / -	
FY 2018		- / -		- / -				- / -				- / -				- / -				- / -				- / -				- / -				- / -				- / -				- / -				- / -	
FY 2019		- / -		- / -				- / -				- / -				- / -				- / -				- / -				- / -				- / -				- / -				- / -				- / -	
FY 2020		- / -		- / -				- / -				- / -				- / -				- / -				- / -				- / -				- / -				- / -				- / -				- / -	
FY 2021		- / -		- / -				- / -				- / -				- / -				- / -				- / -				- / -				- / -				- / -				- / -				- / -	
FY 2022		- / -		- / -				- / -				- / -				- / -				- / -				- / -				- / -				- / -				- / -				- / -				- / -	
FY 2023		- / -		- / -				- / -				- / -				- / -				- / -				- / -				- / -				- / -				- / -				- / -				- / -	
To Complete		- / -		- / -				- / -				- / -				- / -				- / -				- / -				- / -				- / -				- / -				- / -				- / -	
Total		9 / 14.483		1 / 2.644				1 / 1.508				1 / 2.355				0 / 0.000				1 / 2.355				1 / 1.211				- / -				- / -				- / -				0 / 0.000				13 / 22.201	
Installation Schedule																																													
	PYS	FY 2017				FY 2018				FY 2019				FY 2020				FY 2021				FY 2022				FY 2023				TC	Tot														
		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4																
In	9	-	-	-	1	1	-	-	-	-	1	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	13													
Out	9	-	-	-	1	1	-	-	-	-	1	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	13													
Footnotes:																																													
⁽²¹⁾ Increased installation funding in FY 19 to account for increases in installation costs due to new contract firm fixed price cost structure.																																													
⁽²²⁾ PAAA Backfit Kits are partial systems. The last option year under the current CEC Production contract is FY 2016.																																													

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Exhibit P-3a, Individual Modification: PB 2019 Navy						Date: February 2018					
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 7				P-1 Line Item Number / Title: 2606 / Cooperative Engagement Capability				Modification Number / Title: 3 / UC009 - SIGNAL DATA PROCESSOR (SDP) BACKFITS (AN/ USG-2)			

ID Code (A=Service Ready, B=Not Service Ready) :						MDAP/MAIS Code:						
Resource Summary	Prior Years	FY 2017	FY 2018	FY 2019 Base	FY 2019 OCO	FY 2019 Total	FY 2020	FY 2021	FY 2022	FY 2023	To Complete	Total
Procurement Quantity (<i>Units in Each</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost (<i>\$ in Millions</i>)	24.183	3.839	3.285	8.081	0.000	8.081	2.666	2.317	1.533	0.000	0.000	45.904
Less PY Advance Procurement (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) (<i>\$ in Millions</i>)	24.183	3.839	3.285	8.081	0.000	8.081	2.666	2.317	1.533	0.000	0.000	45.904
Plus CY Advance Procurement (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority (<i>\$ in Millions</i>)	24.183	3.839	3.285	8.081	0.000	8.081	2.666	2.317	1.533	0.000	0.000	45.904
(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)												
Initial Spares (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost (<i>\$ in Dollars</i>)	-	-	-	-	-	-	-	-	-	-	-	-

Description:

Strike Group Anti-Air Warfare (AAW) Improvement. Funds are for the procurement of Signal Data Processors (SDP) backfits in alignment with Fleet Modernization Procurement and Installation Plan for CEC Backfit to CG, DDG, CVN, and LHD ship classes

[SIGNAL DATA PROCESSORS (SDP) BACKFITS (AN/USG-2)] Prior Year and FY12 includes funding to procure AN/USG-2B hardware conversion kits. A new cost code (UC013) was created and the funding for the hardware conversion kits has been realigned to this cost code for FY13-18.

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Exhibit P-3a, Individual Modification: PB 2019 Navy								Date: February 2018					
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 7				P-1 Line Item Number / Title: 2606 / Cooperative Engagement Capability				Modification Number / Title: 3 / UC009 - SIGNAL DATA PROCESSOR (SDP) BACKFITS (AN/USG-2)					
ID Code (A=Service Ready, B=Not Service Ready) :								MDAP/MAIS Code:					
Models of Systems Affected: UC009 SIGNAL DATA PROCESSORS (SDP) BACKFITS (AN/USG-2)				Modification Type: SGAAW				Related RDT&E PEs: 0603755N, 0603658N					
Financial Plan	Prior Years	FY 2017	FY 2018	FY 2019 Base	FY 2019 OCO	FY 2019 Total	FY 2020	FY 2021	FY 2022	FY 2023	To Complete	Total	
	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	
Procurement													
Modification Item 1 of 1: UC009 - SIGNAL DATA PROCESSOR (SDP) BACKFITS (AN/USG-2)													
B Kits													
Recurring													
1.1.1) SIGNAL DATA PROCESSORS (SDP) BACKFITS (AN/USG-2) - NonOrganic ⁽²³⁾	29 / 12.266	1 / 0.227	3 / 0.695	9 / 2.127	- / -	9 / 2.127	3 / 0.723	- / -	- / -	- / -	- / -	45 / 16.038	
Subtotal: Recurring	- / 12.266	- / 0.227	- / 0.695	- / 2.127	- / -	- / 2.127	- / 0.723	- / -	- / -	- / -	- / 0.000	- / 16.038	
Subtotal: UC009 - SIGNAL DATA PROCESSOR (SDP) BACKFITS (AN/USG-2)	29 / 12.266	1 / 0.227	3 / 0.695	9 / 2.127	- / -	9 / 2.127	3 / 0.723	- / -	- / -	- / -	- / -	45 / 16.038	
Subtotal: Procurement, All Modification Items	- / 12.266	- / 0.227	- / 0.695	- / 2.127	- / -	- / 2.127	- / 0.723	- / -	- / -	- / -	- / 0.000	- / 16.038	
Installation													
Modification Item 1 of 1: UC009 - SIGNAL DATA PROCESSOR (SDP) BACKFITS (AN/USG-2)	- / 11.917	- / 3.612	- / 2.590	- / 5.954	- / 0.000	- / 5.954	- / 1.943	- / 2.317	- / 1.533	- / 0.000	- / 0.000	- / 29.866	
Subtotal: Installation	- / 11.917	- / 3.612	- / 2.590	- / 5.954	- / -	- / 5.954	- / 1.943	- / 2.317	- / 1.533	- / -	- / 0.000	- / 29.866	
Total													
Total Cost (Procurement + Support + Installation)	24.183	3.839	3.285	8.081	0.000	8.081	2.666	2.317	1.533	0.000	0.000	45.904	

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Exhibit P-3a, Individual Modification: PB 2019 Navy							Date: February 2018					
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 7				P-1 Line Item Number / Title: 2606 / Cooperative Engagement Capability				Modification Number / Title: 3 / UC009 - SIGNAL DATA PROCESSOR (SDP) BACKFITS (AN/USG-2)				
ID Code (A=Service Ready, B=Not Service Ready) :							MDAP/MAIS Code:					
Modification Item 1 of 1: UC009 - SIGNAL DATA PROCESSOR (SDP) BACKFITS (AN/USG-2)												
Manufacturer Information												
Manufacturer Name: Sechan Electronics, Inc. ⁽²⁴⁾							Manufacturer Location: Lititz, PA					
Administrative Leadtime <i>(in Months)</i> : 3							Production Leadtime <i>(in Months)</i> : 18					
Dates	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023					
Contract Dates												
Delivery Dates												
Manufacturer Name: TBD ⁽²⁵⁾							Manufacturer Location: TBD					
Administrative Leadtime <i>(in Months)</i> : 3							Production Leadtime <i>(in Months)</i> : 18					
Dates	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023					
Contract Dates	May 2017	May 2018	May 2019	May 2020								
Delivery Dates	Nov 2018	Nov 2019	Nov 2020	Nov 2021								
Installation Information												
Method of Implementation: ALTERATION INSTALLATION TEAM (AIT):: Installation Name: SIGNAL DATA PROCESSORS (SDP) BACKFITS (AN/US												
Installation Cost	Prior Years	FY 2017	FY 2018	FY 2019 Base	FY 2019 OCO	FY 2019 Total	FY 2020	FY 2021	FY 2022	FY 2023	To Complete	Total
	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>
Prior Years	16 / 11.917	6 / 3.612	4 / 2.590	3 / 1.533	0 / 0.000	3 / 1.533	- / -	- / -	- / -	- / -	0 / 0.000	29 / 19.652
FY 2017	- / -	- / -	- / -	1 / 0.511	0 / 0.000	1 / 0.511	- / -	- / -	- / -	- / -	0 / 0.000	1 / 0.511
FY 2018	- / -	- / -	- / -	0 / 0.410	0 / 0.000	0 / 0.410	3 / 1.533	- / -	- / -	- / -	0 / 0.000	3 / 1.943
FY 2019	- / -	- / -	- / -	5 / 3.500	0 / 0.000	5 / 3.500	0 / 0.410	4 / 2.044	- / -	- / -	0 / 0.000	9 / 5.954
FY 2020	- / -	- / -	- / -	- / -	- / -	- / -	- / -	0 / 0.273	3 / 1.533	- / -	0 / 0.000	3 / 1.806
FY 2021	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2022	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2023	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
To Complete	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
Total	16 / 11.917	6 / 3.612	4 / 2.590	9 / 5.954	0 / 0.000	9 / 5.954	3 / 1.943	4 / 2.317	3 / 1.533	- / -	0 / 0.000	45 / 29.866

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Exhibit P-3a, Individual Modification: PB 2019 Navy		Date: February 2018
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 7	P-1 Line Item Number / Title: 2606 / Cooperative Engagement Capability	Modification Number / Title: 3 / UC009 - SIGNAL DATA PROCESSOR (SDP) BACKFITS (AN/USG-2)

ID Code (A=Service Ready, B=Not Service Ready) :	MDAP/MAIS Code:
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Modification Item 1 of 1: UC009 - SIGNAL DATA PROCESSOR (SDP) BACKFITS (AN/USG-2)

Installation Information

Method of Implementation: ALTERATION INSTALLATION TEAM (AIT):: Installation Name: SIGNAL DATA PROCESSORS (SDP) BACKFITS (AN/US

Installation Schedule

	PYS	FY 2017				FY 2018				FY 2019				FY 2020				FY 2021				FY 2022				FY 2023				TC	Tot
		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4		
In	16	3	1	2	-	-	4	-	-	2	-	1	6	-	1	1	1	1	-	2	1	-	1	1	1	-	-	-	-	-	45
Out	16	3	1	2	-	-	4	-	-	2	-	1	6	-	1	1	1	1	-	2	1	-	1	1	1	-	-	-	-	-	45

Footnotes:

⁽²³⁾ A new cost code (UC013) was created and the funding for the hardware conversion kits has been realigned to this cost code for FY13-18. Funds are for the procurement of Signal Data Processors (SDP) backfits in alignment with Fleet Modernization Procurement and Installation Plan for CEC Backfit to CG, DDG, CVN, and LHD ship classes. FY 19 - Added procurement and installation quantity of 5 units for Mode 5 IFF Acceleration. Increased installation costs in FY 19 as a result of higher shipyard costs due to Firm Fixed Priced Contract cost structure.

⁽²⁴⁾ The last option year under the current SDP-S Production contract is FY16. Planning to award a competitive follow-on contract in FY17.

⁽²⁵⁾ A competitive follow-on contract action is in process with an expected award date of 3Q FY2017.

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Exhibit P-3a, Individual Modification: PB 2019 Navy						Date: February 2018					
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 7				P-1 Line Item Number / Title: 2606 / Cooperative Engagement Capability				Modification Number / Title: 4 / UC010 - SIGNAL DATA PROCESSORS (SDP) BACKFITS (AN/USG-2A)			

ID Code (A=Service Ready, B=Not Service Ready) :						MDAP/MAIS Code:						
Resource Summary	Prior Years	FY 2017	FY 2018	FY 2019 Base	FY 2019 OCO	FY 2019 Total	FY 2020	FY 2021	FY 2022	FY 2023	To Complete	Total
Procurement Quantity (<i>Units in Each</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost (<i>\$ in Millions</i>)	13.500	1.217	0.392	0.421	0.000	0.421	0.804	0.384	0.000	0.000	0.000	16.718
Less PY Advance Procurement (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) (<i>\$ in Millions</i>)	13.500	1.217	0.392	0.421	0.000	0.421	0.804	0.384	0.000	0.000	0.000	16.718
Plus CY Advance Procurement (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority (<i>\$ in Millions</i>)	13.500	1.217	0.392	0.421	0.000	0.421	0.804	0.384	0.000	0.000	0.000	16.718
(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)												
Initial Spares (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost (<i>\$ in Dollars</i>)	-	-	-	-	-	-	-	-	-	-	-	-

Description:

Strike Group Anti-Air Warfare (AAW) Improvement. Funds are for the procurement of Signal Data Processors (SDP) backfits for AN/USG-2A equipment in alignment with Fleet Modernization Procurement and Installation Plan for CEC Backfit to CG, DDG, CVN, and LHD ship classes

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Exhibit P-3a, Individual Modification: PB 2019 Navy									Date: February 2018				
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 7				P-1 Line Item Number / Title: 2606 / Cooperative Engagement Capability					Modification Number / Title: 4 / UC010 - SIGNAL DATA PROCESSORS (SDP) BACKFITS (AN/USG-2A)				
ID Code (A=Service Ready, B=Not Service Ready) :								MDAP/MAIS Code:					
Models of Systems Affected: UC010 SIGNAL DATA PROCESSORS (SDP) BACKFITS (AN/USG-2A)				Modification Type: SGAAW				Related RDT&E PEs: 0603755N, 0603658N					
Financial Plan	Prior Years	FY 2017	FY 2018	FY 2019 Base	FY 2019 OCO	FY 2019 Total	FY 2020	FY 2021	FY 2022	FY 2023	To Complete	Total	
	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	
Procurement													
<i>Modification Item 1 of 1:</i> UC010 - SIGNAL DATA PROCESSORS (SDP) BACKFITS (AN/USG-2A)													
B Kits													
Recurring													
1.1.1) SIGNAL DATA PROCESSORS (SDP) BACKFITS (AN/USG-2A) - NonOrganic ⁽²⁶⁾	21 / 7.496	1 / 0.227	1 / 0.232	1 / 0.236	- / -	1 / 0.236	2 / 0.482	- / -	- / -	- / -	- / -	26 / 8.673	
<i>Subtotal: Recurring</i>	- / 7.496	- / 0.227	- / 0.232	- / 0.236	- / -	- / 0.236	- / 0.482	- / -	- / -	- / -	- / 0.000	- / 8.673	
<i>Subtotal: UC010 - SIGNAL DATA PROCESSORS (SDP) BACKFITS (AN/USG-2A)</i>	21 / 7.496	1 / 0.227	1 / 0.232	1 / 0.236	- / -	1 / 0.236	2 / 0.482	- / -	- / -	- / -	- / -	26 / 8.673	
<i>Subtotal: Procurement, All Modification Items</i>	- / 7.496	- / 0.227	- / 0.232	- / 0.236	- / -	- / 0.236	- / 0.482	- / -	- / -	- / -	- / 0.000	- / 8.673	
Installation													
<i>Modification Item 1 of 1:</i> UC010 - SIGNAL DATA PROCESSORS (SDP) BACKFITS (AN/USG-2A)	- / 6.004	- / 0.990	- / 0.160	- / 0.185	- / 0.000	- / 0.185	- / 0.322	- / 0.384	- / 0.000	- / 0.000	- / 0.000	- / 8.045	
<i>Subtotal: Installation</i>	- / 6.004	- / 0.990	- / 0.160	- / 0.185	- / -	- / 0.185	- / 0.322	- / 0.384	- / -	- / -	- / 0.000	- / 8.045	
Total													
Total Cost (Procurement + Support + Installation)	13.500	1.217	0.392	0.421	0.000	0.421	0.804	0.384	0.000	0.000	0.000	16.718	

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Exhibit P-3a, Individual Modification: PB 2019 Navy							Date: February 2018					
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 7				P-1 Line Item Number / Title: 2606 / Cooperative Engagement Capability				Modification Number / Title: 4 / UC010 - SIGNAL DATA PROCESSORS (SDP) BACKFITS (AN/USG-2A)				
ID Code (A=Service Ready, B=Not Service Ready) :							MDAP/MAIS Code:					
Modification Item 1 of 1: UC010 - SIGNAL DATA PROCESSORS (SDP) BACKFITS (AN/USG-2A)												
Manufacturer Information												
Manufacturer Name: Sechan Electronics, Inc. ⁽²⁷⁾							Manufacturer Location: Lititz, PA					
Administrative Leadtime <i>(in Months)</i> : 3							Production Leadtime <i>(in Months)</i> : 18					
Dates	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023					
Contract Dates												
Delivery Dates												
Manufacturer Name: TBD ⁽²⁸⁾							Manufacturer Location: TBD					
Administrative Leadtime <i>(in Months)</i> : 3							Production Leadtime <i>(in Months)</i> : 18					
Dates	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023					
Contract Dates	May 2017	May 2018	May 2019	May 2020								
Delivery Dates	Nov 2018	Nov 2019	Nov 2020	Nov 2021								
Installation Information												
Method of Implementation: ALTERATION INSTALLATION TEAM (AIT):: Installation Name: SIGNAL DATA PROCESSORS (SDP) BACKFITS (AN/US												
Installation Cost	Prior Years	FY 2017	FY 2018	FY 2019 Base	FY 2019 OCO	FY 2019 Total	FY 2020	FY 2021	FY 2022	FY 2023	To Complete	Total
	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>
Prior Years	16 / 6.004	5 / 0.805	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	0 / 0.000	21 / 6.809
FY 2017	- / -	0 / 0.185	0 / 0.160	1 / 0.000	0 / 0.000	1 / 0.000	- / -	- / -	- / -	- / -	0 / 0.000	1 / 0.345
FY 2018	- / -	- / -	- / -	1 / 0.161	0 / 0.000	1 / 0.161	- / -	- / -	- / -	- / -	0 / 0.000	1 / 0.161
FY 2019	- / -	- / -	- / -	0 / 0.024	0 / 0.000	0 / 0.024	1 / 0.161	- / -	- / -	- / -	0 / 0.000	1 / 0.185
FY 2020	- / -	- / -	- / -	- / -	- / -	- / -	0 / 0.161	2 / 0.384	- / -	- / -	0 / 0.000	2 / 0.545
FY 2021	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2022	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2023	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
To Complete	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
Total	16 / 6.004	5 / 0.990	0 / 0.160	2 / 0.185	0 / 0.000	2 / 0.185	1 / 0.322	2 / 0.384	- / -	- / -	0 / 0.000	26 / 8.045

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Exhibit P-3a, Individual Modification: PB 2019 Navy																		Date: February 2018													
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 7										P-1 Line Item Number / Title: 2606 / Cooperative Engagement Capability										Modification Number / Title: 4 / UC010 - SIGNAL DATA PROCESSORS (SDP) BACKFITS (AN/USG-2A)											
ID Code (A=Service Ready, B=Not Service Ready) :																MDAP/MAIS Code:															
Modification Item 1 of 1: UC010 - SIGNAL DATA PROCESSORS (SDP) BACKFITS (AN/USG-2A)																															
Installation Information																															
Method of Implementation: ALTERATION INSTALLATION TEAM (AIT):: Installation Name: SIGNAL DATA PROCESSORS (SDP) BACKFITS (AN/US																															
Installation Schedule																															
	PYS	FY 2017				FY 2018				FY 2019				FY 2020				FY 2021				FY 2022				FY 2023				TC	Tot
		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4		
In	16	1	2	-	2	-	-	-	-	1	-	-	1	-	-	-	1	-	-	-	2	-	-	-	-	-	-	-	-	26	
Out	16	1	2	-	2	-	-	-	-	1	-	-	1	-	-	-	1	-	-	-	2	-	-	-	-	-	-	-	-	26	

Footnotes:

⁽²⁶⁾ Funds are for the procurement of Signal Data Processors (SDP) backfits for AN/USG-2A equipment in alignment with Fleet Modernization Procurement and Installation Plan for CEC Backfit to CG, DDG, CVN, and LHD ship classes. First Delivery from Competitively awarded May 2017 contract in will be November 2018.

⁽²⁷⁾ The last option year under the current SDP-S Production contract is FY16. Planning to award a competitive follow-on contract in FY17.

⁽²⁸⁾ A competitive follow-on contract action is in process with an expected award date of 3Q FY2017.

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Exhibit P-3a, Individual Modification: PB 2019 Navy										Date: February 2018		
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 7				P-1 Line Item Number / Title: 2606 / Cooperative Engagement Capability						Modification Number / Title: 5 / UC012 - COMMON ARRAY BLOCK (CAB) ANTENNA - SHIPBOARD		
ID Code (A=Service Ready, B=Not Service Ready) :							MDAP/MAIS Code:					
Resource Summary	Prior Years	FY 2017	FY 2018	FY 2019 Base	FY 2019 OCO	FY 2019 Total	FY 2020	FY 2021	FY 2022	FY 2023	To Complete	Total
Procurement Quantity <i>(Units in Each)</i>	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost <i>(\$ in Millions)</i>	3.400	1.822	0.000	9.352	0.000	9.352	13.226	18.120	21.656	21.739	58.359	147.674
Less PY Advance Procurement <i>(\$ in Millions)</i>	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) <i>(\$ in Millions)</i>	3.400	1.822	0.000	9.352	0.000	9.352	13.226	18.120	21.656	21.739	58.359	147.674
Plus CY Advance Procurement <i>(\$ in Millions)</i>	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority <i>(\$ in Millions)</i>	3.400	1.822	0.000	9.352	0.000	9.352	13.226	18.120	21.656	21.739	58.359	147.674
<i>(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)</i>												
Initial Spares <i>(\$ in Millions)</i>	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost <i>(\$ in Dollars)</i>	-	-	-	-	-	-	-	-	-	-	-	-
Description: Strike Group Anti-Air Warfare (AAW) Improvement. Funds are for the procurement of Common Array Block (CAB) antennas for shipboard AN/USG-2B systems in alignment with Fleet Modernization Procurement and Installation Plan for CEC Backfit to CG, DDG, CVN, and LHD ship classes,												

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Exhibit P-3a, Individual Modification: PB 2019 Navy										Date: February 2018			
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 7				P-1 Line Item Number / Title: 2606 / Cooperative Engagement Capability						Modification Number / Title: 5 / UC012 - COMMON ARRAY BLOCK (CAB) ANTENNA - SHIPBOARD			
ID Code (A=Service Ready, B=Not Service Ready) :								MDAP/MAIS Code:					
Models of Systems Affected: UC012 COMMON ARRAY BLOCK (CAB) ANTENNA - SHIPBOARD				Modification Type: SGAAW				Related RDT&E PEs: 0603755N, 0603658N					
Financial Plan	Prior Years	FY 2017	FY 2018	FY 2019 Base	FY 2019 OCO	FY 2019 Total	FY 2020	FY 2021	FY 2022	FY 2023	To Complete	Total	
	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	
Procurement													
Modification Item 1 of 1: UC012 - COMMON ARRAY BLOCK (CAB) ANTENNA - SHIPBOARD													
B Kits													
Recurring													
1.1.1) COMMON ARRAY BLOCK (CAB) ANTENNA - SHIPBOARD - NonOrganic ⁽²⁹⁾	2 / 3.400	- / -	- / -	4 / 9.352	- / -	4 / 9.352	5 / 12.040	5 / 12.400	6 / 15.321	6 / 15.404	14 / 27.786	42 / 95.703	
<i>Subtotal: Recurring</i>	- / 3.400	- / -	- / -	- / 9.352	- / -	- / 9.352	- / 12.040	- / 12.400	- / 15.321	- / 15.404	- / 27.786	- / 95.703	
<i>Subtotal: UC012 - COMMON ARRAY BLOCK (CAB) ANTENNA - SHIPBOARD</i>	2 / 3.400	- / -	- / -	4 / 9.352	- / -	4 / 9.352	5 / 12.040	5 / 12.400	6 / 15.321	6 / 15.404	14 / 27.786	42 / 95.703	
<i>Subtotal: Procurement, All Modification Items</i>	- / 3.400	- / -	- / -	- / 9.352	- / -	- / 9.352	- / 12.040	- / 12.400	- / 15.321	- / 15.404	- / 27.786	- / 95.703	
Installation													
Modification Item 1 of 1: UC012 - COMMON ARRAY BLOCK (CAB) ANTENNA - SHIPBOARD	- / 0.000	- / 1.822	- / 0.000	- / 0.000	- / 0.000	- / 0.000	- / 1.186	- / 5.720	- / 6.335	- / 6.335	- / 30.573	- / 51.971	
<i>Subtotal: Installation</i>	- / 0.000	- / 1.822	- / -	- / -	- / -	- / -	- / 1.186	- / 5.720	- / 6.335	- / 6.335	- / 30.573	- / 51.971	
Total													
Total Cost (Procurement + Support + Installation)	3.400	1.822	0.000	9.352	0.000	9.352	13.226	18.120	21.656	21.739	58.359	147.674	

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Exhibit P-3a, Individual Modification: PB 2019 Navy												Date: February 2018																			
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 7										P-1 Line Item Number / Title: 2606 / Cooperative Engagement Capability										Modification Number / Title: 5 / UC012 - COMMON ARRAY BLOCK (CAB) ANTENNA - SHIPBOARD											
ID Code (A=Service Ready, B=Not Service Ready) :														MDAP/MAIS Code:																	
Modification Item 1 of 1: UC012 - COMMON ARRAY BLOCK (CAB) ANTENNA - SHIPBOARD																															
Manufacturer Information																															
Manufacturer Name: RAYTHEON														Manufacturer Location: ST. PETERSBURG, FL																	
Administrative Leadtime (in Months): 18														Production Leadtime (in Months): 18																	
Dates		FY 2017				FY 2018				FY 2019				FY 2020				FY 2021				FY 2022				FY 2023					
Contract Dates										Dec 2018				Dec 2019				Dec 2020				Dec 2021				Dec 2022					
Delivery Dates										Jun 2020				Jun 2021				Jun 2022				Jun 2023				Jun 2024					
Installation Information																															
Method of Implementation: ALTERATION INSTALLATION TEAM (AIT):: Installation Name: COMMON ARRAY BLOCK (CAB) ANTENNA - SHIPBOARD																															
Installation Cost		Prior Years		FY 2017		FY 2018		FY 2019 Base		FY 2019 OCO		FY 2019 Total		FY 2020		FY 2021		FY 2022		FY 2023		To Complete		Total							
		Qty (Each) / Total Cost (\$ M)		Qty (Each) / Total Cost (\$ M)		Qty (Each) / Total Cost (\$ M)		Qty (Each) / Total Cost (\$ M)		Qty (Each) / Total Cost (\$ M)		Qty (Each) / Total Cost (\$ M)		Qty (Each) / Total Cost (\$ M)		Qty (Each) / Total Cost (\$ M)		Qty (Each) / Total Cost (\$ M)		Qty (Each) / Total Cost (\$ M)		Qty (Each) / Total Cost (\$ M)		Qty (Each) / Total Cost (\$ M)							
Prior Years		- / -		2 / 1.822		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -		0 / 0.000		2 / 1.822							
FY 2017		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -							
FY 2018		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -							
FY 2019		- / -		- / -		- / -		- / -		- / -		- / -		0 / 1.186		4 / 3.644		- / -		- / -		0 / 0.000		4 / 4.830							
FY 2020		- / -		- / -		- / -		- / -		- / -		- / -		- / -		0 / 2.076		5 / 4.555		- / -		0 / 0.000		5 / 6.631							
FY 2021		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -		0 / 1.780		5 / 4.555		0 / 0.000		5 / 6.335							
FY 2022		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -		0 / 1.780		6 / 5.630		6 / 7.410							
FY 2023		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -		6 / 6.335		6 / 6.335							
To Complete		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -		- / -		14 / 18.608		14 / 18.608							
Total		- / -		2 / 1.822		- / -		- / -		- / -		- / -		0 / 1.186		4 / 5.720		5 / 6.335		5 / 6.335		26 / 30.573		42 / 51.971							
Installation Schedule																															
	PYS	FY 2017				FY 2018				FY 2019				FY 2020				FY 2021				FY 2022				FY 2023				TC	Tot
		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4		
In	-	1	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2	2	-	2	2	1	-	2	2	1	-	26	42
Out	-	1	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2	2	-	2	2	1	-	2	2	1	-	26	42
Footnotes: ⁽²⁹⁾ The unit price of the CAB increased by approximately \$400K from the PB-16 budget starting in FY17. This increase is driven by the requirement to procure 1 new Environmental Control System Controller (ECSC) for each CAB that is procured. Removed Procurements in FY 17 and Installation costs for FY 18 and FY 19 due to congressional mark in FY 17 (4.069M)																															